

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number
WO 2005/014715 A1

(51) International Patent Classification⁷: C08L 23/10, B60R 21/00

(21) International Application Number:
PCT/EP2004/008720

(22) International Filing Date: 3 August 2004 (03.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03018013.7 7 August 2003 (07.08.2003) EP
60/496,579 20 August 2003 (20.08.2003) US

(71) Applicant (for all designated States except US): BASELL
POLIOLEFINE ITALIA S.P.A. [IT/IT]; Via Pergolesi,
25, I-20124 Milano (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GARAGNANI,
Enea [IT/IT]; Viale Mons. Natale Mosconi, 76, I-44100
Ferrara (IT). PELLICONI, Anteo [IT/IT]; Via Volta, 22,
I-45030 S.M. Maddalena (IT).

(74) Agent: GAVERINI, Gaetano; Basell Poliolefine Italia
S.p.A., Intellectual Property, Via Pergolesi, 25, I-20124 Mi-
lano (IT).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 2005/014715 A1

(54) Title: POLYOLEFIN COMPOSITION HAVING A HIGH BALANCE OF STIFFNESS AND IMPACT STRENGTH

(57) Abstract: A polyolefin composition comprising (percentage by weight): (A) from 60 to 85% of a broad molecular weight distribution propylene polymer (component A) having a polydispersity index from 5 to 15 and melt flow rate of from 20 to 78 g/10 min (according to ASTM-D 1238, condition L); and (B) from 15 to 40% of a partially xylene-soluble olefin polymer rubber (component B) containing at least 65% by weight of ethylene. Said composition finds application in automotive field.

Sheet No. ...4...

Box No. VIII (ii) DECLARATION: ENTITLEMENT TO APPLY FOR AND BE GRANTED A PATENT

The declaration must conform to the standardized wording provided for in Section 212; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (ii). If this Box is not used, this sheet should not be included in the request.

Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:

In relation to this international application, Basell Poliolefine Italia S.p.A. is entitled to apply for and be granted a patent by virtue of the following:

Basell Poliolefine Italia S.p.A. is entitled as employer of the inventors:
Garagnani Enea and Pelliconi Anteo

This declaration is made for the purposes of all designation.

☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

Box No. VIII (iv) DECLARATION: INVENTORSHIP (only for the purposes of the designation of the United States of America)
The declaration must conform to the following standardized wording provided for in Section 214; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iv). If this Box is not used, this sheet should not be included in the request.

**Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv))
 for the purposes of the designation of the United States of America:**

I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.

This declaration is directed to the international application of which it forms a part (if filing declaration with application).

This declaration is directed to international application No. PCT/..... (if furnishing declaration pursuant to Rule 26ter).

I hereby declare that my residence, mailing address, and citizenship are as stated next to my name.

I hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications," by application number, country or Member of the World Trade Organization, day, month and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, having a filing date before that of the application on which foreign priority is claimed.

Prior Applications: EP 03018013.7 - 7 August 2003
 US 60/496,579 - 20 August 2003

I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: Garagnani Enea

Residence: Ferrara, IT
 (city and either US state, if applicable, or country)

Mailing Address: Viale Mons. Natale Mosconi, 76, 44100 Ferrara, Italy.

Citizenship: IT

Inventor's Signature:
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date:
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

Name: Pelliconi Anteo

Residence: S.M. Maddalena, IT
 (city and either US state, if applicable, or country)

Mailing Address: Via Volta 22, 45030 S.M. Maddalena, Italy.

Citizenship: IT

Inventor's Signature:
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date:
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".

Sheet No. 6

Box No. IX CHECK LIST; LANGUAGE OF FILING

This international application contains:		This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):		Number of items
(a) In paper form, the following number of sheets:		1. <input checked="" type="checkbox"/> fee calculation sheet		1
request (including declaration sheets)	6	2. <input type="checkbox"/> original separate power of attorney		
description (excluding sequence listing and/or tables related thereto)	13	3. <input type="checkbox"/> original general power of attorney		
claims	1	4. <input checked="" type="checkbox"/> copy of general power of attorney, reference number, if any: 48353		1
abstract	1	5. <input type="checkbox"/> statement explaining lack of signature		
drawings	—	6. <input checked="" type="checkbox"/> priority document(s) identified in Box No. VI as item(s): 2		1
Sub-total number of sheets	21	7. <input type="checkbox"/> translation of international application into (language):		
sequence listing		8. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material		
tables related thereto		9. <input type="checkbox"/> sequence listing in computer readable form (indicate type and number of carriers)		
(for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (c) below)		(i) <input type="checkbox"/> copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application)		
Total number of sheets	21	(ii) <input type="checkbox"/> (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter		
		(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the sequence listing mentioned in left column		
(b) <input type="checkbox"/> only in computer readable form (Section 801(a)(i))		10. <input type="checkbox"/> tables in computer readable form related to sequence listing (indicate type and number of carriers)		
(i) <input type="checkbox"/> sequence listing		(i) <input type="checkbox"/> copy submitted for the purposes of international search under Section 802(b-quater) only (and not as part of the international application)		
(ii) <input type="checkbox"/> tables related thereto		(ii) <input type="checkbox"/> (only where check-box (b)(i) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater)		
(c) <input type="checkbox"/> also in computer readable form (Section 801(a)(ii))		(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the tables mentioned in left column		
(i) <input type="checkbox"/> sequence listing		11. <input type="checkbox"/> other (specify):		
(ii) <input type="checkbox"/> tables related thereto				
Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the				
<input type="checkbox"/> sequence listing:				
<input type="checkbox"/> tables related thereto:				
(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)				
Figure of the drawings which should accompany the abstract:	—	Language of filing of the international application:		English

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

 Garagnani Enea	 Pelliconi Anteo	 Gaverini Gaetano
---	--	--

For receiving Office use only		For International Bureau use only	
1. Date of actual receipt of the purported international application:	03. 08. 2004	2. Drawings:	
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:	03 AUG 2004	<input type="checkbox"/> received:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):		<input type="checkbox"/> not received:	
5. International Searching Authority (if two or more are competent): ISA /	6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid		
Date of receipt of the record copy by the International Bureau:			